**Work with a partner to solve the problems below:**

1. Graph figure PQRS: P(-4, 3), Q(10, 3), R(10, -3), S(-4, -3).
   1. Determine the area and perimeter of the figure.

b) Give the coordinates of a figure that has a perimeter half that of figure PQRS.

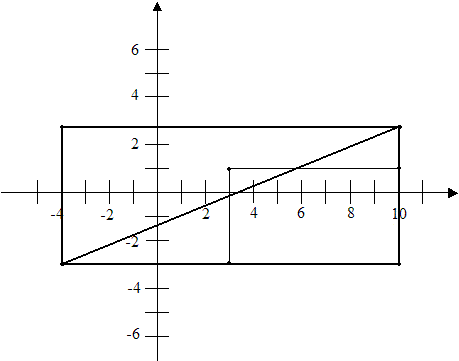
c) Give the coordinates of a triangle that has an area half that of figure PQRS.

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1. Graph rectangle  . Determine the perimeter and area of the figure. Give the coordinates for rectangle that has the same area, but a different perimeter.
2. Graph triangle   Determine the area of the triangle. Give the coordinates for a triangle that has an area twice that of triangle 

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Solution page:



R

S

Q

P

1. area = 112 units2

perimeter = 44 units

1. answers may vary – check student’s work. Here is one possibility (3, 1), (10, 1), (10, -3), (3, -3)
2. answers may vary – check student’s work. Here is one possibility (10, 5), (10, -3), (-4, -3)

1.

1. Rectangle MNOP

A = 24 units2

P = 20 units

Rectangle QRST – answers will vary

One possible solution: rectangle QRST: Q(4, 10), R(7, 10), S(7, 2), T(4, 2)

A = 24 units2

P = 22 units

1. Triangle ABC

A = 21 units2

Triangle DEF

A = 42 units2

Triangles coordinates will vary

One possible solution: triangle DEF: D(-7, 13), E(-11, 1), F(-4, 1)